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FRAGILITAS OSSIUM.

Read before the Clinton County (Iowa) Med. Society, July 18th, 1871, by CHARLES H. LOTHROP, M.D., Lyons, Iowa.

AT the last meeting of our Medical Society I gave you a brief account of a case which had recently come under my observation. At your request, I have endeavored to present it to you in a more connected and more pleasing manner. And having consulted various authorities upon this subject, I present with the case whatever else I have been able to collect from them upon this peculiar surgical disease. I propose first to speak of the disease.

Fragilitas Ossium signifies a brittleness of the bones. Some pathologists have given the name to this condition of the osseous texture, but as we have other conditions of the bone, which are just as pathognomonic of this disease as mere brittleness, fragilitas does not seem to be a sufficiently correct term to indicate the disease. Other pathologists, in order to correct this deficiency of the term, have combined fragilitas and mollities as one and the same disease, leading us to infer that brittleness and softening may occur at the same time. If it is true that in fragilitas there is a deficiency of the animal constituents, and in mollities there is a deficiency of the earthy material, then fragilitas and mollities are not one and the same disease. It is true, however, that in fragilitas we always find, beside brittleness, a peculiar condition of the bone, it being almost saturated with a certain oily substance, causing the bones to become so greasy, when dried, after death, as to become unfit (according to Saillant) to be preserved as preparations. Their organized vascular part is diminished and the oily substance degenerated.

The difference then between mollities and fragilitas appears to be this: In fragilitas the material necessary to the elasticity of the bone has become in some manner lost, the last remnant of which is discovered in the form of that degenerated oily matter before referred to; while in mollities the earthy material which gives strength and form to the bone has disappeared from the structure and left the animal matter to assume whatever shape, weight or pressure may produce. We are instructed that brittleness of the bone may take place at any period of life, and some writers have made the extravagant assertion that this disease sometimes attacks the fœtus in utero. With all due deference to their opinions, I can but regard those instances as cases of morbid softening rather than brittleness of the bone, as, at that period, we find little of the earthy constituents of the bone and a very large proportion of the animal tissue. It is said that this disease is more common to childhood and to advanced age; but this observation does not seem to be correct, if we observe closely the pathological changes which take place in this peculiar condition of the bone. The bone, it is true, becomes brittle as age advances, but is it a consequence of a diseased condition of these particular constituents of the bone—or would it not be more appropriate, more consonant with proper views of pathology to ascribe such a condition (brittleness) to the natural decay of all parts of the system, preparatory to the final dissolution?—a loss of substance not only in these tissues, but in every portion of the body. This being correct, then, it is not a disease consequent upon age, but the result of a vitiated condition of the system originating in defective nutrition, and may as readily attack youth, and with as much propriety be placed among the diseases of childhood as of age. In fact, it is not confined to any period of life. This disease may arise from various causes; among the most common are scrofula, syphilis, long confinement, more especially when confinement is the result of a rheumatic affection. During the progress of cancerous disease, too, it is not uncommon. It is also said to be hereditary. I do not wish to be understood as ignoring hereditary influences, far from it; or as ex-

pressing the opinion that we do not meet with debility—we most assuredly do—but it is the result of disease rather than disease itself, and we are too prone to give diseases these names in place of searching patiently and prudently for the real disease, and then in the same manner prescribing the appropriate remedies. The exciting cause of fracture, Mr. Miller informs us, need be but a slight one. A hasty or inadvertent step, turning in bed, rising from the seat or knees, a trip on the carpet, or any sudden muscular exertion may suffice.

Two remarkable instances are mentioned by Mr. Salter, of Poole. The first was a female, aged 82. She felt the right thigh suddenly break as she was standing by her bureau. For several months previous to the accident she had had constant and severe pain in the part of the bone which was broken, and she had long been afflicted with a cancerous ulceration of the mamma.

The second case was also a female, aged 56. For five months preceding the accident, she had labored under severe pain of right thigh. As her friends were putting her into a cart, the bone snapped about three inches below the trochanter. For several years she had a schirrus of the left breast. Louis mentions a nun who broke her arm by merely leaning on a servant, and in the *London Medical Journal* an account is given of a person who could not even turn in bed without breaking his bones. Prof. Gibson in his surgical works mentions an instance of a young man 19 years of age, who from infancy has been subject to fractures from the slightest causes, and what is remarkable the boy has enjoyed excellent health, and the bones have united without difficulty or much deformity. Dr. Good relates in his Study of Medicine (vol. 5, p. 332, 3d edition) that he was once present at a church in which a lady, nearly 70 years of age, broke both the thigh bones in merely kneeling, and on being taken hold of to be carried away, had an os humeri also broken without any violence and with little pain. Hardly any constitutional disturbance ensued, and in a few weeks the bones united. Mr. Bell inclines to the belief that it is not necessarily a result of disease, as he has been able to discover in only two cases of fragility, a palpable deviation from the healthy structure of the bones affected. In one case, a gentleman, at the middle period of life, fractured his humerus while unscrewing a music stool. The fracture was comminuted and did not unite. The arm was amputated at the shoulder.

Mr. Erichsen remarks that these fractures are unattended by any attempt at the formation of callus. I can conceive that as a rule Mr. Erichsen may be correct; but there are so many recorded exceptions to it that I do not think we should be warranted in being governed by it. If what has been advanced in reference to the pathology of this disease is correct, then the cases seen, with one exception, by Mr. Bell, and that of Dr. Good could not have been examples of this disease—simply concomitants of advancing age.

In the vegetable kingdom we find some plants noted for their extreme brittleness, such, for example, as the laurus benzoin, or spice wood tree, while others are equally noted for their strength and toughness, as iron wood, hickory, &c. Would it seem singular, or any indication of disease, to find the same natural laws governing the animal kingdom? Professor Gibson's case seems to be a fair illustration of it. The boy was subject to these fractures from infancy; they united without difficulty and with little or no deformity. In too readily assigning these causes to disease have we not overlooked a portion of the natural laws? In reviewing the cases cited, we find that both of Salter's cases had cancerous disease. The history of Louis's case was not given, but upon an examination of Malgaigne's Treatise on Fractures, I found the case reported in full. He says Louis's case is better known. It occurred in a nun, aged 60, whose arm was broken by a coachman in helping her into a carriage. No callus was formed. Seven months after, while sitting in an easy chair and carelessly dropping her hand upon her thigh, her femur was fractured by this slight shock, and Louis, struck by this fragility, learned at last that the patient had an ulcerated cancer of the breast. Mr. Bell speaks of two cases—relates to us but one; in that one the arm was amputated, but the result of the amputation is not known. Malgaigne speaks in reference to the causes of this disease very fairly and fully. (See page 25 et seq.)

The symptoms of this disease, writers say, are of an extremely obscure and insidious character. There is pain of a wandering character about the limbs and trunk, assuming usually a rheumatic character. The patient becomes debilitated and emaciated. Soon after, spontaneous fracture of some of the bones occurs. Mr. Erichsen says that the diagnosis of this affection has to be made in the early stages from rheumatism. This is not so easy, and, indeed, is at first impossible; but after a time, when the fragility of the

osseous system manifests itself, it is then that the true nature of the affection is revealed. It comes on without any assignable cause. There are no reliable symptoms. In general, fragility goes on augmenting to the time of death, which happens in from six to eighteen months, the patient meanwhile being bed-ridden. It is looked upon by the profession as an incurable affection. The only exception to this rule is when it occurs as an effect of the syphilitic or rheumatic poison, and even then it seldom admits of complete relief, unless it presents itself in a very circumscribed form.

Solly believes it is of a truly malignant character. Medico-legal writers, with but one exception, have ignored this peculiar disease. Taylor, in his work on Medical Jurisprudence, says the bones of aged persons are sometimes very brittle, and slight violence will then produce fracture. This has been regarded as an extenuating circumstance when the fracture produced by a slight blow was followed by death.

Certain diseases, such as syphilis, arthritis, cancer, scurvy and rachitis render bones more fragile; but they are sometimes preternaturally brittle in apparently healthy persons, and this brittleness appears hereditary. In such cases a defence might fairly rest upon an abnormal condition of the bones if the violence producing the fracture were slight. No person can meet with an accident of this kind without being instantly conscious of it. In fractures arising from this cause there will be no abrasion of the skin nor any appearance to indicate that a blow has been struck, while the marks of a blow would of course remove all idea of the fracture having had a spontaneous origin.

All the authorities agree in reference to treatment. It is tonic and supporting. They also agree that there is little or no prospect of success. In a word, it is a disease of which there is little known, and about which authors widely differ. And we have yet to wait for the results of the researches of some patient explorer, before any definite conclusion can be formed of the strange pathological condition of this particular structure.

The history of the case referred to is as follows:—

F. M., aged 14, of German parentage, was brought to me March 8th, 1871. He was suffering from spontaneous fracture of the lower third of the right femur. The father was confined to his bed with phthisis pulmonalis; for the last year has been afflicted with a severe cough, but continued to labor until about three months ago; does not know of the existence of any hereditary disease in the family. Mother healthy; no hereditary disease in her family. There are four children in the family, all healthy, with the exception of the patient, who refers his sickness to a cold which he had taken while skating. After exercising in this manner and getting into a profuse perspiration, he would lie down upon the ice and remain there until rested. Soon after, he was attacked with pain in his joints and other parts of the body; there was also swelling of the right leg. A physician was called, who treated him for rheumatism. Various remedies were used, but without any improvement, except that the swelling in the right leg subsided. About three weeks before I saw him, the left leg commenced swelling and was intensely painful. On the morning of March 8th, while endeavoring to turn in bed, the accident occurred, of which he became instantly aware, and cried out he had broken his leg.

I found him pale and emaciated. He was literally starving. Tongue slightly coated. Pulse 120. No appetite. I found the fracture before mentioned, and a large abscess situated near the middle of the right thigh. He was suffering from fragilitas ossium, and, from what I had learned from our surgical authorities, my prognosis was unfavorable. I reduced the fracture, put it in splints, prescribed morph. sulph. for the relief of the pain, and, as a tonic, syrup of the iodide of iron, dose 20 drops every six hours, with good nourishing and stimulating diet. Wine and beer *ad libitum*. On the next day I opened the abscess; a pint or more of pus was discharged.

Before opening the abscess, he was put under the influence of chloroform, with a very happy effect. Afterward a poultice of pulverized flaxseed was applied to the wound.

March 10th.—Pulse 112; tongue less furred; œdematous condition of face and extremities; pupils dilated; no stools; no pain from wound, but it was discharging freely. Little improvement in the appetite.

March 11th.—Passed a restless night from pain in the region of the fracture. Pulse 130; tongue moist, but pointed; appetite improving.

March 15th.—Prescribed, in addition to iron, the compound syrup of phosphates (Wyeth's), dose half a teaspoonful three times a day. About this time he was very irritable.

March 29th.—There is no union and but little improvement generally. Great pain

in limbs and bowels. He has been suffering so much that it has been impossible to retain the limb in apparatus, and all efforts in that direction have been abandoned. The limb was then placed in the most comfortable position, and retained there by means of cushions, pillows, &c. Soon after, an abscess formed at the point of fracture, and in a few days discharged pus. About this time, I removed a small piece of bone from the wound, and on the next day a larger piece. Both abscesses were now discharging freely, and I was prepared to see him sink of exhaustion from such a terrible drain upon the system. Beef and other meats were used in abundance. The patient, as well as his attendants, seemed to be fully aware of the necessity of this treatment.

April 13th.—Removed another small piece of bone. Appetite good. No more emaciation than was noticed ten days ago. On the 15th, removed a piece of bone about two inches in length. In his movements about the bed, he had displaced the fragments, and any endeavor to place the leg in position produced so much pain that, at the solicitation of himself and mother, it was allowed to remain in its crooked condition. He kept it very quiet, as he did not dare move it on account of the intense pain it produced. From this time, his appetite remained good. Beef in different forms was given, vegetables, fruits, wine, beer, and whatever else would tempt the appetite. The iron and syrup of phosphates were continued during the treatment. About the first of May, bony union was found to be taking place. There is now perfect union, and, contrary to what we are taught to expect, callus may be found there. He has now a good appetite, and is improving rapidly. He is not taking any medicine, and is able to get from his bed to a lounge or chair without assistance. There is false anchylosis of the left knee-joint. It is, however, improving, and I have no doubt that he will have perfect use of the joint in a short time. The right leg is crooked and twisted, but there is good union, and he is able to bear his weight upon it. I now regard his recovery as certain. If, however, I should be mistaken in my present prognosis, however much disappointed I might be, I shall consider it my duty to report to you, for sometimes as much instruction is given and knowledge acquired by reports of our unfavorable cases and treatment of them as there is in our most successfully treated and brilliantly reported ones.

CASE OF RUPTURE OF RIGHT AURICLE.

By A. B. Caldwell, M.D., Marysville, Cal.

On Sept. 8th I was summoned to hold a *post-mortem* examination upon the body of J. N., aged 40.

All the history I could obtain was, that he had been a cattle-dealer, notably temperate in all his habits, and had for years complained of nothing more than "severe pains in the chest." The day before, while talking excitedly about some election bets, he had fallen from his chair and rolled heavily upon the floor, where he remained motionless. Those present commenced chafing his extremities and giving brandy. Convulsive action soon began, accompanied by frothing at the mouth and snapping of the jaws. The physician sent for arrived about this time, and states that the convulsive action suddenly ceased, and that he was *then* unable to get pulsation in the carotids, although with his other hand over the chest he could, for some seconds, distinguish a *motion* of the heart.

The result of the State election had been announced a short time previous to this sudden death, and entitled the deceased to large amounts of betted money in the hands of a third party. His friends, reasoning upon the *post ergo propter* principle, suspected foul play, and desired the stomach and contents saved for analysis!

Autopsy, twenty hours after death. Yielding to the wish of a senior, I opened the head first. The membranes contained a considerable amount of bloody serum; pia mater much injected; lateral ventricles filled with clear serum; choroid plexus injected; concretions in pineal gland unusually large, one of them being fully as large as half a grain of wheat; no extravasation into cerebral substance; cerebellum presented nothing abnormal.

Upon opening the pericardium, thick, bloody fluid welled up. This being sponged away to the extent of eight fluid ounces, the heart was found entirely invested by a semi-solid coagulum, weighing almost half a pound. Upon removing this coagulum, there was found a rupture of the walls of the right auricle, measuring one inch and five eighths in length. Bicuspid and mitral valves presented nothing worthy of notice. The arch of the aorta was rigid with calcareous deposit. At several points *spiculæ* and *plates* of the deposit were readily detached from the inner surface of the artery. The aortic semilunar valves were free from deposit of any kind, and were thinner than in the healthy subject. The heart

itself (not weighed), was smaller than usual; all the cavities were empty, except the right auricle, which held a prolongation of the external coagulum. Under the microscope, the muscular tissue of the heart was found extremely fatty. The rupture proved to be a clean "rip" in the direction of a line drawn from the superior to the inferior vena cava. Both lungs were firmly adherent to the walls of the chest, though otherwise normal.

REMARKS ON CERTAIN LOCAL PAINS IN THE THORAX AND THEIR RELATION TO PULMONARY TUBERCULOSIS.

By Mons. Peter. Translated from the Annales et Bulletin de la Société de Med. de Gand.

The painful points of the chest, popularly called "stitches," are not observed in every phthisical subject; they may, indeed, be experienced without any necessary connection with phthisis. But a certain class of these, especially those occurring about the upper regions of the thorax are so frequently associated with pulmonary tuberculosis that their great diagnostic significance ought not to escape the notice of the practitioner.

They are to be distinguished according to their location as *lateral*, or those in relation with the intercostal nerves; *at the base*, pertaining to the phrenic nerves with irradiation to the right and left shoulders and to the neck; and *retro-sternal*, of the cardiac plexus, with possible extension to the shoulder and to the diaphragm if the phrenic is also involved.

In all these cases, except where the pain is due to some organic lesion of the tissues of the thoracic walls, that is to say to a myositis, a pleurodynia, a chondritis or an osteitis, the disease is a neuralgia dependent on a neuritis or a neurosis. This once recognized, its nature and origin are to be sought, and it should be determined, first of all, if it have any relation to a disordered general condition; if the patient suffers from general nervous disturbance; if he is anæmic or rheumatic or syphilitic or suffering from lead-poisoning, or if the neuralgia is caused, on the other hand, by an inflammation of the nerve, dependent on adjacent inflammation which has extended by continuity to the neurilemma. This last is the condition of things more often met with in phthisical subjects. Incidentally, we note its distinction from the intense pain in the side, which characterizes the onset of hydropneumothorax, an attack so marked in its suddenness that when it is observed in a tuberculous patient, the physical signs indicating the presence of either gas or fluid within the pleural cavity should be sought for without delay.

The local pains which occur at the upper part of the thorax and which, for distinction, we will call the superior lateral, are spoken of by patients as pains in the back or between the shoulders. Often they are attended with fever. If, in such a case, careful examination be made, it will be discovered that the pain depends on a local neuritis which is itself consecutive to a corresponding localized pleuritis; and this pleuritis at the apex is in turn related intimately with pulmonary phthisis. M. Peter has established this pathological connection in many instances in his hospital service, the patients having entered the hospital only on account of their local pains, but with no suspicion of trouble in the lung. In one such case, that of a young woman, much reduced in her general condition through a complication of influences, the painful points occupied the first three intercostal spaces on the left side. Pressure on the spinous processes of the cervico-dorsal vertebræ developed a sharp pain over the last cervical vertebra and the three upper dorsal vertebræ. These four vertebræ correspond with the first three intercostal spaces or nerves; just as the five upper cervical spines correspond with the phrenic nerve. Thus the locality of the neuralgia in the present instance was not doubtful.

But because of the fact that the neuralgia was on the left side, the seat of election of chloro-anæmic neuralgias; that, moreover, the patient was young, greatly debilitated and anæmic, it was far more natural to attribute all her troubles to anæmia; the theory of a neuritis dependent on a tuberculous pleurisy was not suggested or authorized by precedent or by any symptom in the case pointing directly to any diseased condition of the lungs. The patient was herself unwilling to believe herself phthisical, yet auscultation fully verified the diagnosis.

M. Peter has designated the specific characters and significance of these local pains. He states that neuralgia of anæmic origin does not occupy the first three intercostal spaces, but préferably the fourth and fifth and sometimes the sixth. The most tender spinous process in these cases is generally that of the fourth dorsal vertebra; pressure on this process sometimes develops a sharp pain which extends to the extremity of the nerve, under the left breast.

But it is not only as an aid to diagnosis

that the study of these localized pains is of interest; some inferences of a practical importance suggest themselves. The significance and relations of the pain being determined, remedies will be directed not only to this one symptom but to the condition which it suggests and by which it is caused. The correlative neuralgia, pleurisy and tuberculosis can all be attacked at once. In such cases M. Peter has not relied on morphia or atropia hypodermically as palliative of the neuralgic pain. Such a method should be reserved (if used at all) for diaphragmatic pleurisy, which is attended with sharp pain, and for cases of simple pleuritic pain with capricious dry cough. It is better in the majority of cases to prescribe blisters dressed with morphia. If the pain be not too severe, we may, before resorting to the blister, use sinapisms, chloroform or tincture of iodine. M. Peter frequently combines laudanum or morphia with the iodine, the death of the skin from the use of the iodine promoting the absorption of the narcotic.

Finally, if the pain be very severe and of an inflammatory origin; and if, moreover, one is not governed by a superstitious terror of anæmia, there should be no hesitation about bloodletting by leeches or cupping, even in anæmic and tuberculous subjects. M. Peter says he has more than once heard M. Cruveilhier order half a dozen leeches under the clavicles of phthisical patients, and he has invariably observed as a result, not only the disappearance of the pain, but for a long time also the crackling râles as well. The general condition improved, and the patient would desire to be discharged from hospital; at one blow the pain and the congestion which caused it were attacked.

The reaction against bloodletting has carried us too far, M. Peter thinks; and without making it the universal rule to resort to this remedy in the treatment of neuralgia in anæmic patients, he recognizes the fact that very often it is not a great evil, but rather that it procures such a measure of relief that it would be simple folly to withhold such a measure in all respects so desirable.

Severe Medical Examinations in London.—Out of sixty-eight candidates who presented themselves before the the Royal College of Surgeons, England, in May last, twenty-seven were rejected.—*New York Medical Record.*

Selected Papers.

A NEW OVARIOTOMY CLAMP—ALSO APPLICABLE TO OTHER SURGICAL PURPOSES.

By B. F. Dawson, M.D., New York, Attending Physician to the N. York State Woman's Hospital, Outdoor Department; to the New York Free Dispensary for Sick Children, &c.

The operation of ovariotomy is rapidly attracting increased attention, and while but a short time since it was performed by a few surgeons, we now hear of its being undertaken by many young and inexperienced physicians with the boldness of old ovariotomists.

Notwithstanding, however, the frequency with which the operation is performed, and the consequent progress made in the procedure itself and the after-treatment of the patient, yet it cannot be denied by any one who studies the subject that much, very much, remains to be learned, before it can be classed amongst the perfected operations of surgery.

Even yet, some of the eminent ovariotomists of Europe and this country are at variance as to many of the most important points in the operation; for instance, as to the treatment of the pedicle, whether it is best to ligate and return it or not into the peritoneal cavity; to clamp it, and keep it external to the abdominal wound; or to dispense with both ligature and clamp, by substituting the écraseur, the actual cautery, or laceration.

The proper treatment of the abdominal incision is also a mooted question, the majority advising immediate and perfect closure, while a few, and not the least distinguished, advocate the practice of leaving a small opening, to allow the exit of septic gases and material, and the advised washing out of the peritoneal cavity.*

Although there exists such difference of opinion in regard to the treatment of the pedicle, yet the majority of distinguished ovariotomists are becoming more in favor of clamping the pedicle than of ligating it, and some have given the most conclusive proofs of the former in the statistical results of their cases (Spencer Wells, Thomas, Atlee, &c.), by far a greater number so treated recovering, than where the various

* See Prof. E. R. Peaslee's paper on "Injections into the Peritoneal Cavity after Ovariotomy," in the American Journal of Obstetrics and Diseases of Women and Children, vol. iii., No. 2, p. 300.

forms of sutures are used, and the pedicle returned into the abdomen.

The advocates of the latter method, as well as those in favor of the clamp, have been active in endeavors to perfect each detail of the individual methods, and have given us as results varieties in ligatures as regards material and application, and clamps of different principles and special peculiarities.

As it is not my purpose in this paper, however, to discuss the various methods of treating the pedicle, but only the application of the clamp, and especially one possessing new principles, I will pass immediately to the subject.

The object of all clamps is to so compress and retain the ovarian pedicle as to perfectly control all hæmorrhage, either temporarily until the ligature is passed, or permanently, without the latter, as the operator may desire.

With one exception (Atlee's clamp), the principle of action of all clamps is the same —compression of the pedicle between two parallel arms of steel, which are brought into co-aptation by two screws, or a hinge and screw combined. Such instruments compress the tissues in but two directions, and thus allow them to spread more or less between the bite of the clamp, and this very spreading of the pedicle is somewhat essential for the proper closing of the clamp.

Now, two great objections seem to me to be attached to this *spreading* of the pedicle: 1st, it must somewhat prevent (perhaps only in a slight degree) *perfect* ligation of the pedicle by any of the various ligatures, for, after ligation, that portion between the ligature and clamp is spread out in a fan-like manner, and therefore offers unequal resistance to ligation; and, 2d, if the clamp only is used, the pedicle expands transversely to the wound, and thus prevents sufficient approximation at the point where it is situated.

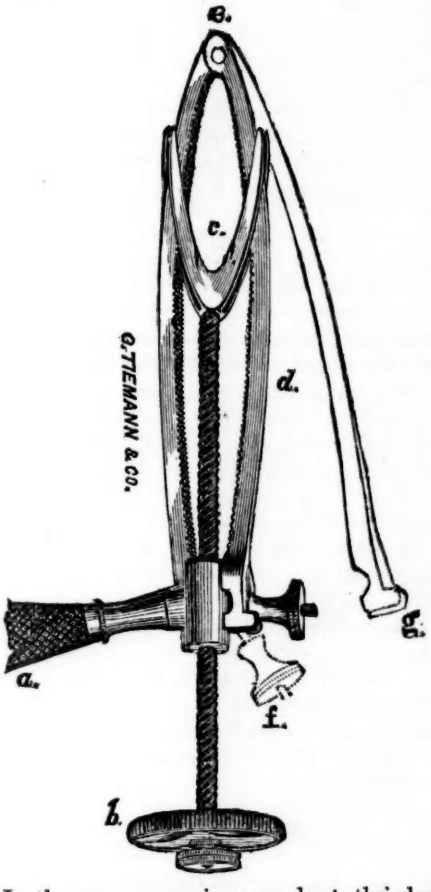
The above conclusions have been arrived at after having been present and assisted at some sixteen operations for ovariotomy, performed respectively by Drs. T. Addis Emmet, T. G. Thomas, E. R. Peaslee, Joseph Kammerer, John Byrne and Stephen Merritt.

To overcome one of these objections, Dr. Washington L. Atlee, of Philadelphia, has recently invented a clamp "to limit, within certain points, the expansion or spreading of the pedicle when the blades of the clamp are screwed together."*

By his clamp the pedicle is compressed in four directions, and thus made to occupy a very small space in the abdominal wound. This one has certainly great advantages over other instruments, but, as its mechanism is somewhat complicated, there is yet an opening for further improvements.

I will therefore call attention to a clamp of entirely new action which I have recently had made, and the mechanism of which is exceedingly simple.

The principal features of this clamp are: 1st: It compresses the pedicle in a uniform manner and into as small a compass as may be needed; 2d, the compressing force is exerted by a single screw; 3d, its application around a pedicle is quick and exceedingly simple; 4th, with it a ligature can be passed directly around the compressed portion of the pedicle, and be made more secure than with other instruments; 5th, ecrasement could be performed if it were desirable.



In the accompanying woodcut, the clamp is seen locked, and in the act of compressing a pedicle, if we imagine the wheel (*b*) to be turning. By the turning of this wheel the slide (*c*) is slowly pushed up towards

* Am. Journal Med. Sciences, April, 1871, page 370.

the joint (*e*), and thus the tissues are constricted to any requisite degree in an elliptical manner.

In applying the clamp, the arm (*d*) is to be opened by unscrewing the nut (*f*), and then passed around the pedicle and closed again, and made fast as before, the slide (*c*), having previously been screwed back towards the handle.

If the clamp is to be used instead of the ligature, after sufficient compression of the pedicle, the handle (*a*) and the wheel (*b*) are to be removed by unscrewing them, which renders the clamps much lighter and perfectly flat, so that no inconvenience is caused by its resting on the abdomen.

The dotted outlines (*g*) in the cut show the arm of the clamp opened ready for application and needs no particular explanation.

Besides the purpose for which this clamp was originally designed, it may advantageously be used in the removal of hæmorrhoids, portions of the tongue, penis, scrotum, and extraneous growths.

The entire instrument is so light, compact and small that its case may be carried in the vest-pocket without inconvenience. It is manufactured by G. Tiemann & Co., 67 Chatham Street, New York.

A CASE OF ULCUS SERPIGINOSUM SYPHILITICUM.

By J. C. Ray, Jr., M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases.

D. C. R. presented himself to me August 5th, 1871, with the following history:—Native of the United States, tinsmith, 31 years of age, married, has two children aged 10 and 6 years. His wife has had one miscarriage between the two children. R. contracted two sores upon his penis in November, 1868. These did not heal until the following March, and during January they caused œdema and phymosis. Had a papular eruption upon the body and extremities in May, which disappeared in August. In June, 1869, had two sore spots along side of the arms, which healed in a month upon the application of a caustic. Underwent mercurial treatment for three weeks during the existence of the primary sores. Noticed at that time three kernels in the right groin.

In the winter of 1869–70, he had another eruption upon the body and extremities similar in nature to the previous one. At the same time he had some scabs upon his scalp. The eruption disappeared early in the spring of 1870, when ulcerations began upon the right shoulder and right forearm. In the fall of the same year, the right shoulder healed, and in February, 1871, the right forearm healed. In March, 1871, ulceration began upon the left forearm, and healed completely by the middle of June, to break out again early in July, producing ulcerations, which are now present. Ulceration of the left shoulder began in March, 1871, accompanied by a discharge more profuse than that of the other ulcers. This shoulder healed and broke out again, and is at present completely healed. R. has not had iritis, nor alopecia, nor rheumatism, nor sore throat. Has noticed during the past year a hard prominence upon the anterior surface of the right tibia, which has never caused pain save when pressed upon. Had typhoid fever in 1862. Never had any sores previous to 1868. Has had gonorrhœa once.

Present Condition.—The seat of the initial lesion does not show any cicatrix or induration. Varicocele of the left side. A node upon the anterior surface of the right tibia, sensitive to pressure. Inguinal and brachial glands enlarged and indurated. Two cicatricial surfaces upon the posterior aspect of both shoulders, each having an irregularly circular outline and a diameter of four inches. A cicatrix upon the right arm and forearm, involving the posterior and external surface of the elbow-joint, and the whole upper half of the external surface of the forearm. A cicatricial and ulcerating surface upon the left arm, involving almost completely the entire surface of the lower third of the arm and upper half of the forearm. The ulcers upon this surface are three in number. Each is in the shape of a perfect crescent. The three of similar size. The distance between the two horns of each crescent measures two inches. These creeping ulcers present a healthy, florid, clean appearance, their surfaces very slightly depressed below the surrounding surface, and their discharge is of a thin serous character. Edge of the convex border not undermined or differing in aspect from the edge of the concave border. Two of these ulcers were advancing in cicatricial tissue, the other in normal integument. They cause the patient no pain. The cicatrix involving the flexor surface of the left elbow has contracted somewhat, rendering it impossible to completely extend the forearm upon the arm. This causes the patient some inconvenience in his trade. He says that the ulcers which produced the cicatrices upon the shoulders and right arm

were similar in shape and appearance to those now present upon the right arm. He does not express any anxiety about the latter, as he is sure they will heal, but wishes to get some medicine to purify his blood and prevent their return. His general health is very good.

Ordered the following treatment:

℞ Hydrarg. chlor. cor. gr. ij.
Potass. iodidi. ʒ iv.
Aquæ ʒ iv.

M. One teaspoonful in a wineglass of water, after each meal.

℞ Ungt. hydrarg. ox. rub.
Ungt. simplicis, partes æquales.

M. et ft. ungt. To be applied to the ulcers.

August 20th.—The ulcers have nearly cicatrized, and the patient is apprehensive that they have been healed too rapidly.

Dr. Emanuel Kohn, in an exhaustive treatise upon ulcus serpiginosum, published in a recent number of the *Archiv für Dermatologie und Syphilis*, describes an ulcer serpiginous in character, but differing in every other respect from that described in the above case, and he concludes that serpiginous ulcers, as described by him, are of a non-syphilitic origin. The ulcers in the case I have related, from their shape and mode of progress, are clearly entitled to the epithet serpiginous, and from the history of the case and the results of treatment, are of undoubted syphilitic origin, leading to but one conclusion, that two serpiginous ulcers may be met with. The one, so well and minutely described by Dr. Kohn, non-syphilitic, obstinate, and intractable in its character; the other due to syphilis, and readily amenable to anti-syphilitic remedies. —*The American Journal of Syphilography and Dermatology.*

Reports of Medical Societies.

THE BOSTON SOCIETY OF MEDICAL SCIENCES.

J. ORNE GREEN, M.D., SECRETARY.

Oct. 3d, 1871.—The Society met at the house of Dr. White. Dr. Wadsworth in the chair.

Dr. White read a paper on the protection acquired by the human skin (and other tissues) against the action of certain animal poisons after repeated inoculation, claiming that the frequent inoculation of some poisons gave a gradual immunity from any poisonous effects. He instanced the effects of mosquito bites, which he thought were more severe in children than in adults, much more severe in foreigners who had recently arrived in this country than in natives, and in support of this spoke of a whole family, recently arrived from England, which he had just seen, upon the members of which the bites of mosquitoes had produced a violent eruption of the skin resembling pemphigus. He thought that the immunity derived from frequent inoculations was analogous to that from vaccine matter against variola.

In reply to questions, Dr. White said that he considered it as established that poisonous snakes were not killed by their own poisons; insects, however, he said, did not enjoy this immunity, as wasps and bees were known to kill each other by their poison.

Dr. Amory said, in support of Dr. White's theory, that in regions where black flies abound, persons after a few years are not affected by the poison. This immunity is not obtained in one season, but only after a prolonged residence; such persons are bitten as at first, but escape all the disagreeable effects from which a non-resident suffers.

Dr. Wigglesworth asked how it was, then, that in persons affected for many years with lice we see no cessation in the toxical action of the bites upon the skin; as is shown by the non-cessation from scratching and the progressive severity of the affection, so that in old cases we see a marked increase in the deposition of pigment in the skin.

Dr. White thought that the subjective symptoms were different after a time from those felt at first; that the lice cease to irritate and are not felt; the increased pigment he thought was due to the blood drawn to the skin by the increased number of bites.

Dr. Fitz thought that the continuous eczema kept up the scratching.

Dr. Nichols considered it a fact that children suffer most from mosquito-bites, and he had known such bites to be mistaken by the family for chickenpox and even smallpox.

Dr. Dwight showed a specimen which he said was rare in this country; it was the complete osseous auditory apparatus of the common finner [Balœnoptera musculus] and was the property of the Boston Society of Natural History. It consisted of the ossicula, the tympanum and labyrinth, the two latter opened so as to show their interiors, and had been prepared by him recently. He said:—

"A minute description of a specimen of comparative anatomy without practical deductions would hardly be in conformity with the objects of this Society. As this is probably a unique specimen, I venture to show it and to draw a general comparison between the human and the cetacean ear. The ears of several species of whale have been more or less perfectly described by Hunter, Sir Everard Home, Hyrtl and others, but strangely enough I have not met with any at all accurate description of it in this species. The typical auditory apparatus of the higher animals may be diagrammatically represented as consisting of three chambers—the external, with soft walls, for at least a part of its extent, and bounded internally by the membrana tympani; the second chamber is on the inner side of this membrane and opens into the pharynx by the narrow tube named after Eustachius, and presents two windows in its internal wall, one oval, opening into the vestibule, closed by the stapes, and one round, opening into the Scala pyrnani, but closed by a membrane. The third chamber is small, called the vestibule, with a spiral canal the cochlea, and three semicircular canals opening from it. To compare, therefore, the ears of different animals, these three chambers are to be compared respectively one with the other. Another point presents itself before we can proceed, and that is the bone containing the auditory apparatus. The divisions of the temporal bone as used in human anatomy are avowedly unscientific; for a true division we must turn to the embryo, which presents a squamous portion, a petrous corresponding to the petrous and mastoid portions in the adult, and a tympanic surrounding the membrane. The temporal bone of the apes approaches that of the human embryo more nearly than it does that of the man. In the whole the matter is simplified by the fact that the squamous portion appears as a distinct bone of the cranium, so that only the tympanic and petrous remain. The tympanic portion presents the characteristic shell-like form, and from its outer wall springs the process representing the malleus. The long process is the part coössified with the tympanic bulla, the manubrium is represented by a swelling, and near its base a small tubercle represents the processus brevis. The head presents two articular surfaces for the incus, which, besides its articular head, presents a conical 'long process,' bent at the end to meet the stapes. The short process is a mere tubercle. The stapes is perforate and closes the fenestra ovalis. The petrous portion has an anterior, a posterior and a middle or labyrinthic division, of which the last is the most important. The superior surface presents the internal auditory meatus, consisting of two equal canals, of which the anterior is the aqueduct of Fallopius, the posterior the meatus proper; on the anterior surface of this portion is a small foramen which communicates with the aqueduct of Fallopius and is doubtless for the chorda tympani nerve. With regard to the inner wall of the tympanic cavity, the fenestra ovalis is very evident, but the fenestra rotunda is at quite a distance from it. The latter appears to open into the Scala tympani at the same point as the aqueductus cochleæ. The cochlea presents about two and one-quarter turns. It apparently has never been studied in this species, but in no other whale of which I have found a record does the number of turns exceed $2\frac{13}{60}$; this is Hyrtl's estimate for the B. Rostrata, but Drs. Carte and MacAllister give it only two. The minute triangular canal in the substance of the lamina spiralis and which is thought to be peculiar to the cetacea is well shown. The semicircular canals were very minute, but were unfortunately spoiled in making the preparation, owing to the extreme brittleness of the bone."

Dr. Amory said that he had tried the hydro-carbon exhibited at the last meeting, and which was claimed to be an anæsthetic, on a dog. The vapor was inhaled from a sponge, like ether; the dog resisted, but gradually became less active, breathed more slowly, and then became suddenly asphyxiated, with livid tongue, &c.; artificial respiration with nitrous oxide was immediately begun, and after several minutes, involuntary movements of respiration took place; artificial respiration was continued, and he soon breathed regularly and slowly; this continued for fifteen minutes, when he suddenly recovered perfectly. Anæsthesia and muscular relaxation were complete all this time, and the action of the agent was about as rapid as that of chloroform. He advised, before further experiments, that the agent be purified as far as possible from irritating substances. The amount necessary to produce asphyxia was much less than with chloroform. Dr. Amory suggested that it might be one of the hydrocarbons with which Dr. Richardson, of London, is now experimenting.

Dr. Dwight said that he had recently observed a curious instance of the retention of nervous irritability in a snapping turtle to which he had given one drachm of dilute

prussic acid followed by cyanide of potassium; it soon became quiet, and the viscera were removed, but the heart, laid on a table, continued to beat for over an hour. One and a half hour after all the viscera had been removed, the head, however, remaining on, the body was placed on the floor and walked with a feeble but regular gait for several feet.

Dr. Amory said that the cyanides poison by paralyzing the involuntary movements, and hence the respiration, but that the heart beats for a long time.

Dr. Wadsworth had seen a turtle with the head off walk across a room.

Dr. Dwight said that such a fact was an argument against the power of coördination of motion lying in the head.

Dr. Webber said that all the examples referred to of motion apparently with a purpose in decapitated or eviscerated reptiles belong to the class of reflex actions referred to by Maudsley as showing that the spinal cord is educated by long use to the coördination of certain actions; thus when a drop of acid is placed on the thigh of a (decapitated) frog, it will try to remove this with the foot of that side; so when the turtle is placed on the floor the sensation conveyed to the cord causes the accustomed action of walking. It would, of course, be difficult to say whether or not the cerebrum may not take part in the action when the turtle retains the head.

Dr. Warren stated that it was always necessary to break up the spinal cord of a decapitated frog to prevent reflex action.

The regular hour for balloting having arrived, the Society elected as members Dr. Henry P. Bowditch and Dr. Henry P. Quincy.

Dr. Warren asked how rapidly a solution of cyanide of potass. is absorbed when taken into the stomach, and whether after five minutes, remedies would be of any avail.

Dr. White said that persons had died within two minutes and perhaps within one half hour after swallowing it: that if a person lived for half an hour, he thought the solution must have been a very weak one.

Dr. Homans had seen two cases, both very rapidly fatal.

Dr. Amory had found in experiments with animals that death usually occurred in from three hours to five hours; those animals which lived twenty minutes recovered. He had tried various antidotes without effect.

Dr. Warren said that he thought in Vienna no antidote was given, as it was considered useless.

The Society then proceeded to elect officers for the ensuing year. Dr. Amory was elected Treasurer; Dr. Wigglesworth, Secretary; Drs. Oliver, Warren and White, a committee on nominations.

Adjourned at ten o'clock.

Medical and Surgical Journal.

Boston: Thursday, October 26, 1871.

A READY AND EFFECTIVE METHOD OF PURIFYING THE WARDS OF A HOSPITAL WITHOUT REMOVING THE PATIENTS.

The exigencies of their own foreign and civil war have made the purification of hospital wards a matter of interest among French surgeons, at a time when so many sick and wounded persons have been brought under their care. We give an abstract of some remarks made by the Editor of *L'Union Médicale*, M. Amédée Latour, on the method proposed by M. Rabot, a pharmacist of Versailles.

The best method of attaining the end in view is, of course, the abandonment of the infected places. But this means is not, at all times, practicable, and then recourse must be had to chemical agents whose purifying and disinfecting powers are more or less efficient. The problem is to obtain freedom from infection in the wards of a hospital without removing the patients or resorting to any other inconvenient method. The solution of this problem has been attempted by M. Rabot, in a manner both simple and efficacious.

In the first half of 1868, hospital gangrene appeared twice in three of the wards of the hospital at Versailles. Circumstances prevented the removal of patients from the wards, and the means of disinfection commonly employed signally failed. It then occurred to M. Rabot to make use of oxygen in the infected wards.

"Every evening," he says, "a quantity of oxygen was generated in a large iron retort and, by means of a rubber tube, was thrown into each ward in amount equal to a thousandth part the capacity of the ward. This amount seemed to us not too large for the respiratory organs of the patients. In

the morning the wards were opened and aired as usual, whenever the temperature and state of the atmosphere allowed; then, after closing the windows, a second supply of oxygen was introduced. After each application of oxygen, a pinch of an odoriferous powder (cascarilla) was thrown on a hot shovel, with a view to its moral effect on the patients by rendering apparent to their senses a process which they could not comprehend. Moreover, at each extremity of the wards the following mixture was placed in a receptacle:—peroxide of manganese, 500 grammes; solution of hypochlorite of lime, 5 kilogr. This caused a constant disengagement of oxygen."

The following results were obtained. On the morning of the first day of trial, the nurses, the employés, and the patients noticed a diminution of the odor which previously had rendered entrance to the wards very disagreeable. This improvement became more marked from day to day. A feeling of freshness had replaced the disagreeable sensation of vitiated air. From day to day the wounds became normal, free suppuration was established and cicatrization advanced rapidly. The experiment, which was commenced on the 15th of February, was completed on the last day of the month, every ill symptom having disappeared.

Gangrene again appeared two months later, and the trial of the same remedy was again made, with like success. The same result was also attained in another institution.

The use of oxygen was suggested by M. Rabot before the late war. During the war and after the delaration of peace Versailles was filled with wounded, and hospital gangrene appeared again in the hospitals. M. Amédée Latour is uncertain whether or not this method of purification has been continued by the pharmacist who suggested it.

AID FOR CHICAGO.

In publishing the letter of Dr. Davis last week, we thought our intention of soliciting assistance for physicians in Chicago, who have lost everything by the fire, would be understood; but, that there may be no question, we will add that any persons desirous of assisting members of the profession in Chicago may send directly to the Editor of this Journal, and their contributions shall be at once transmitted to Dr. Davis.

The Committee of Physicians appointed at Faneuil Hall to act in connection with the general committee of this city have already received liberal donations from the physicians of the vicinity; they will gladly transmit any farther sums which may be sent them. The committee consists of Drs. George Derby, I. T. Talbot and Samuel A. Green.

We have just received a note from Dr. Thayer, of Brooklyn, N. Y., which we place before our readers.

Mr. Editor,—The Medical Society of the County of Kings (N. Y.), at a special meeting held Oct. 13th, raised one thousand dollars for the benefit of the suffering members of the medical profession in Chicago.

The money was entrusted to Professors Gunn, Davis, Johnson and Frear, of Chicago, to be used at their discretion.

The aid of one Society amounts to little, but may be seconded by many others throughout the country, to an extent to afford much needed assistance to our professional brethren who have lost everything.

Wm. Henry Thayer, M.D.

Brooklyn, N. Y., Oct. 20, 1871.

Unpaid Medical Services. *Mr. Editor*,—In this town we employ a good physician by the year to medicate the poor, so that none may suffer for want of attendance; and several years ago the practising physicians passed the following resolution, which has been observed most faithfully.

We have collected many bills that could not have been obtained by any other means. In but a single instance has it failed me. We are not like the common carrier, obliged to take all that come; we may choose our customers, but having once undertaken a case must attend it to the end, whether we are to receive pay or not (unless discharged by the patient), and are held pecuniarily responsible for any neglect or want of skill by which bad results may follow. If the medical man allows his services to be unpaid or underrated it is his own fault, for "a man will give all that he hath for his life."

John Branch, M.D.

St. Albans, Vt., Oct. 16, 1871.

Whereas, Some persons are to be found

in this community who live in fashionable style, pay their merchants and mechanics well, and would not refuse to pay a rum or gambling bill, yet not only neglect but obstinately refuse to pay their physicians, although they may owe their lives to his skill and attention;

Resolved, Therefore, that we pledge ourselves to each other never to lower the dignity of the most useful and honorable profession known among men, by practising in the families of such persons as are indebted to either of us for medical services.

Provided they have received a copy of this resolution, and we have been notified of the fact.

JOHN BRANCH, M.D.,
R. C. M. WOODWARD, M.D.,
J. L. CHANDLER, M.D.,
S. R. DAY, M.D.

STATISTICS OF DISEASES OF THE BONE IN THE VIENNA HOSPITAL.—Drs. Alfred Menzel and Herman Perco, in order to determine the frequency of caries in the different bones, and the relation of chronic disease of the bone to tuberculosis and other chronic diseases of the internal organs, have examined the autopsy reports of the General Hospital of Vienna for the last half century, and tabulate their results as follows.

In 52,256 autopsies were found 2106 cases (4 per cent.) of chronic disease of the bones, viz. 1996 of caries and 110 of necrosis. These were divided among the different bones as follows:—Skull and bones of the face, necrosis 21, caries 205; vertebræ, caries 702; sternum, clavicle and ribs, necrosis 16, caries 184; scapula, necrosis 5, caries 4; shoulder-joint, caries 28; diaphysis of the humerus, necrosis 5, caries 13; elbow-joint, caries 93; radius, caries 2; ulna, caries 4; wrist-joint and bones of the hand, caries 41; pelvis, necrosis 17, caries 80; hip-joint, caries 189; femur-diaphysis, necrosis 24, caries 31; knee-joint, caries 337; tibia-diaphysis, necrosis 20, caries 30; fibula-diaphysis, necrosis 2, caries 2; ankle-joint and bones of the foot, caries 150. Total, 110 cases of necrosis, 1996 of caries.

Cases of pure necrosis after osteo-myelitis and acute periostitis were rare. The vertebræ were the bones most frequently affected with caries; in 185 cases the cervical, in 310 the dorsal, and in 199 the lumbar vertebræ were diseased. In 8 cases the seat of the disease was not given.

In 527 cases the exact vertebra was stated: the second cervical and the sixth dorsal were the most frequently diseased, then in order, the fifth, eighth and seventh dorsal and first lumbar; then the third cervical and the third, fourth, ninth and tenth dorsal and the fourth lumbar, &c. Next in frequency to caries of the vertebræ came caries of the knee-joint, and next caries of the skull and of the bones of the head; the 205 cases of the latter gave 100 of caries of the petrous portion of the temporal bone.

Of these cases 1295 were males, 811 females; but this does not prove the greater frequency of the disease among men, for the number of males in the hospital is always greater than that of the females.

In 22 per cent. of all these cases there was no chronic disease of the internal organs. In the remaining 78 per cent. such disease was found, showing that the result of all the cases is very important in considering the prognosis of carious processes.

More than a fourth of the cases of caries which were dissected (21·1 per cent.) showed chronic diffuse disease of the abdominal glands; and of these, caries of the head and trunk was noted in 21·5 per cent.; of the upper extremities in 26·6 per cent.; of the lower extremities in 32·8 per cent. From this it appears that the latter predispose to such abdominal diseases; but it is remarkable that 42·8 per cent. of the shoulder-joint cases also showed such a complication.

Caseous masses, ulcerations, cavities and tubercle were found in 54·2 per cent. of all the cases of caries.

In some cases very perfect caseous masses were found surrounding the carious joints; the combination of miliary tubercle with caries without caseous masses was less frequent than those of caseous masses in combination with caries without true tubercle. This seems to show that caries very seldom leads to tubercular infection, except in combination with caseous masses in other parts of the body, especially in the internal organs; this combination is apparently the result of the so-called scrofulous diathesis. A direct relation between caries and miliary tuberculosis could not be discovered.

Among the special internal diseases found with caries were hydrocephalus, chronic or subacute, most of the cases occurring with caries of the upper extremities; purulent meningitis, seldom, however, with caries of other bones than those of the head; amyloid degenerations, most frequent of the liver, next of the spleen, next of the kidneys. These diseases of the internal organs occurred chiefly with caries of the diaphyses and of the bones of the chest

and pelvis, while caseous matter and tubercle were generally found with caries of the joints and of the spongy bones.

Studying the diseases of the internal organs according to the locality of the caries, it is seen, for instance, that with caries of the vertebræ no internal disease was found in 24 per cent., caseous masses and tubercle in 56·8 per cent., and chronic diffuse disease in 22·2 per cent.—*Schmidt's Jahrb.*, No. 7, 1871.—*Allg. Med. Central. Zeitung*, No. 73, 1871.

An Enormous Collection of Earthy Matter in a Human Lung. By V. Gorup-Besanez.—The two cases were under the care of Prof. Zenker; V. Gorup-Besanez made the chemical examination of the lungs.

One was a woman who was employed in the manufacture of the books of thin red paper in which gold-leaf is placed. Fifty-seven grm. of one lung was incinerated, the ash treated with muriatic acid and examined for oxide of iron, of which 0.828 grm. were found. Supposing the oxide equally distributed through both lungs, the total amount would be between 21 and 22 grm.

The second case was a manufacturer of ultramarine. Two hundred and twenty-seven grm. were incinerated and the ash remaining gave 3·1935 grm. siliceous sand, 0·3298 grm. quartz-sand, and 0·329 grm. of oxide of iron.

Considering the total weight of both lungs 1500 grm., and these substances to be equally distributed, the total weight of sand, &c., would be 29·86 grm.—*Annalen d. Chemie u. Pharmacie.—Med. Chir. Rundschau*, July, 1871.

Appointments.—At an adjourned meeting of the Board of Overseers of Harvard University, the following appointments were confirmed:

J. Nelson Borland, M.D., as instructor in clinical medicine; Clarence J. Blake, M.D., and John O. Green, M.D., as lecturers on otology for the current academic year; and Henry K. Oliver, M.D., as lecturer on laryngoscopy for the current academic year.

The president also presented votes of the corporation appointing James C. White, M.D., as professor of dermatology; George Derby, M.D. as professor of hygiene; Henry W. Williams, M.D., as professor of ophthalmology; and John E. Tyler, M.D., professor of mental diseases, for the medical school, and all for the term of five years from September 1, 1871, and the same were referred to a committee.

The president also presented votes of the corporation proposing amendments to the votes passed July 17, 1867, establishing the professorships of dental pathology and therapeutics, of operative dentistry, and of mechanical dentistry, repealing the clauses that required that the professors should be graduates of a medical school with a medical degree; and the same were referred to the same committee.

The following were appointed a committee to visit the medical and dental schools: Samuel A. Green, M.D.; Hon. Martin Brimmer; Nathaniel B. Shurtleff, M.D.; Winslow Lewis, M.D.; Henry I. Bowditch, M.D.; Morrill Wyman, M.D.; William Read, M.D.; Charles G. Putnam, M.D.; George Hayward, M.D.; Daniel Harwood, M.D.; Hall Curtis, M.D.; Frederick Winsor, M.D.

Dr. George F. Jelly has been appointed Superintendent of the McLean Asylum for the Insane, in place of Dr. J. E. Tyler, resigned.

Chloroform in Labor.—Dr. Graily Hewitt, in the Obstetrical Society of London (*Medical Press and Circular*) uttered the following language:—"We have come (some of us, at all events) to recognize the fact that chloroform has a tendency to make labor 'lingering'; that it sometimes enfeebles the uterus, and may thus cause hæmorrhage. This tendency it is proposed to do away with by diluting the chloroform by mixture of alcohol or other vapors, or by accurate mixture with air. Dr. Sansom has pointed out the great liability to the inhalation of poisonously high percentages of chloroform at high temperatures, unless proper care be exercised. Mr. Ellis has given us new inhalers for effecting such mixtures. The general conclusion, I take to be, that in ordinary midwifery practice, the anæsthetic should be diluted; that it should not be given to produce the full effect, and that in all cases rather excessive precautions against hæmorrhage are required when chloroform is given.—*Pacific Med. Journal.*

Displacement of Cartilage of Fourth Rib. By Samuel D. Flagg, M.D., St. Paul, Minn.—During the evening of June 29th, ——, female, æt. 10 years, while playing with several children, ran violently against the corner of an ordinary deal table. It is stated that the child was faint and breathed with difficulty for a short time, but soon returned to play. No swelling or other evidence of injury was observed by her friends.

On the 1st of July, about 48 hours after receiving the injury, while exercising somewhat violently, she complained of sudden pain at the left costo-sternal articulation and a sensation of something having given way. Soon afterwards I saw the child for the first time, and found a slight, non-crepitant swelling at the latter point, and the sternal extremity of the cartilage of the fourth rib displaced forward, its posterior surface being very nearly on a plane with the anterior surface of the sternum. A minute fragment of bone, unconnected with the sternum or cartilage, was noticed, which I took to be a fragment chipped off from the margin of the articular depression on the edge of the sternum. Neither pain nor embarrassed respiration were notably prominent; crepitus could be detected, but not very distinctly; preternatural mobility was very evident.

The points of interest in the above case are the small amount of suffering and general disturbance caused by the accident, and the comparatively slight force which produced the injury in so young a subject.

Writers mention the rarity of fracture of the ribs or their cartilages in childhood, and Hamilton, in his exhaustive work on fractures, &c., states that "in childhood and infancy it is sometimes almost impossible to break them, so that children and even adults are often crushed and killed outright, where, although the pressure has been directly upon the thorax, the ribs have resumed their position, and have been found not to be broken."—*Northwestern Medical and Surgical Journal.*

Spontaneous Fracture of the Femur.—At a meeting of the Clinical Society of London, November 25, 1870, Mr. Durham related a remarkable case of spontaneous fracture of the femur. When first seen by him in March, 1867, the patient, a professional man, aged 44, was seated, half-dressed, in an easy-chair. He thought himself capable of walking about, and was surprised to find this impossible. The right femur was found broken at the junction of the upper and middle thirds, the limb being shortened by three inches. Three months previously, the patient had fallen down stairs and hurt his thigh; but he soon felt nothing of the injury, which he thought a trifling one. Seven weeks later, however, he began to have aching pain in the thigh, which was considered and treated as neuralgic; and when this had lasted three weeks, he felt, on going to bed one night, a sudden increase in the pain, and fell on his bed in great agony. Next morning, he could not move the thigh, which was much swollen. He was quite unconscious of having subjected the limb to any sudden strain. After a few days, the swelling and pain diminished, and he got up, but could not walk about; and it was about ten days after that Mr. Durham, visiting him for the first time, in consultation, found his thigh broken. Under treatment the bone united; in the course of four months, the patient could move about; two months later, he returned to professional work. He remains quite well. Mr. Durham thought it probable that, at the time of the fall, some injury of the bone had taken place, which had been followed by gradual interstitial degeneration and absorption of bony tissue, instead of healthy repair, leading to spontaneous fracture of the bone. The patient had, it seemed, been subjected to great worry and wear and tear of brain, and Mr. Durham suggested, as a topic for discussion, the relation which may exist between overwork or excitement of brain and defective nutrition of bone.—*London Lancet.*

Local Anæsthesia.—Dr. Spessa (*Lancet*) "states in the *Bulletin des Sc. Med.* (Italy) that he has succeeded in preventing pain, during the slitting of a fistulous tract, by injecting a solution of morphine into the tract before the use of the knife. The same author had occasion to touch the vulva vegetation of a young girl with butter of antimony; the pain was very acute, but disappeared on the part being brushed over with a solution of morphia. A boy of fifteen, suffering from hip-joint disease, required an issue over and behind the great trochanter. An injection of morphine was first made over the region, and Vienna paste applied, which latter remained about eight minutes. The paste did not give any pain."—*Medical Cosmos.*

Case of Superfœtation.—In the *Wiener Allg. Med. Zeit.*, a case of superfœtation is given by Schusta, of Seiden. A robust woman, of 26, was delivered, after tedious labor, by forceps. The placenta came away in three-fourths of an hour, and on carefully examining it, a second amniotic sac was found, which contained a male fœtus, nine inches long, and which weighed five ounces.

Medical Miscellany.

Spasmodic Muscular Contraction—Arterial Compression.—M. Broca had under his care, a few months ago, in the Hôpital de la Pitié, a man who had broken both bones of his leg an hour before his admission to hospital. The muscular contraction was so violent that it was impossible to reduce the fracture. M. Broca thereon employed a method which he had found successful in cases of painful cramps of the lower limbs, viz., compression of the femoral artery. Almost immediately the muscles became relaxed, and reduction was effected with ease. Subsequently, in re-applying the splints, the contraction returned, and was again overcome by the same means. The *Journal de Médecine et de Chirurgie Pratiques* for March, in relating the case, says that the simple and easy means employed by M. Broca ought always to have a trial before giving chloroform, which is often done in such a case.—*N. Y. Med. Record.*

Chorea Treated with Strychnine—In a severe case of chorea, reported by Dr. Hayden *Brit. Med. Jour.*, May 20, 1871), the patient, a girl 12 years of age, took the one-twentieth of a grain of strychnia in mixture three times a day. This treatment was continued until slight rigidity of the muscles at the back of the neck was observable, with the effect of moderating the contortions of the shoulders and trunk. She was afterwards put on half-drachm doses of the syrup of the triple phosphate (strychnia, quinia and iron) three times a day. This produced the most beneficial results. A recovery was effected in about six weeks—not a long time, when the severity of the case is taken into consideration.—*Med. Times.*

Carbolic Acid Paper.—Carbolic acid paper, which is now much used for packing fresh meats, for the purpose of preserving them against spoiling, is made by melting five parts of stearine at a gentle heat, and then stirring in thoroughly two parts of carbolic acid; after which five parts of melted paraffine are to be added. The whole should be well stirred together until it cools; after which it is again melted and applied with a brush to the paper, in quires, in the same way as in preparing the waxed paper so much used in Europe for wrapping various articles.—*Medical and Surgical Reporter.*

Veratrum Viride an Antidote to Opium.—Dr. E. H. Sholl, of Alabama, communicates a case of poisoning by morphia, which was cured by veratrum. The patient, a negro boy, aged 15 years, had typhoid fever, and took an overdose of morphia, which had been prescribed for hiccough. It was followed by stertorous breathing, contracted pupils, and so forth. His mouth was pried open, and gtt. xviij. Norwood's tincture poured in with two ounces of brandy. In one hour, every symptom of poison had vanished.—*Ibid.*

Enlarged Tonsils.—Dr. Rumbold, of St. Louis, has treated successfully a number of cases of enlarged tonsils by injecting the glands by means of a hypodermic syringe, with a solution of iodine—iodine, gr. ij.; potass. iod., ℈ij.; aqua, ℥j. Generally, a slight inflammation followed the injection, but soon subsided. From twelve to seventeen injections, ordinarily two a week, were sufficient to reduce the gland to its normal condition.—*Med. Press and Circular.*

Dr. A. Marvin Shew has been appointed Lecturer on Insanity in the Medical Institution of Yale College.

To Correspondents.—Communications accepted:—Anasarca during Pregnancy, without evidence of Renal Disease, or Convulsions during Labor; Death by Peritonitis and Acute Nephritis, nineteen days after Delivery.—Malignant Smallpox treated with Sulphur Fumigations, and Sulphurous Acid internally.—Case of Depression of the Frontal Bone during Labor.

Pamphlets Received.—Transactions of the New Hampshire Medical Society (Eighty-first Anniversary), held at Concord, June 6 and 7, 1871. (From the Secretary.) Pp. 110.—Clinical Examination of Urine. With a Description of a Convenient Apparatus for its speedy Analysis. By Reuben A. Vance, M.D., New York. Pp. 12.—Introductory Lecture to the Course on Pathological Anatomy at the University of Pennsylvania, Sept. 4, 1871, by Jos. G. Richardson, M.D., Lecturer on Morbid Anatomy, &c. Pp. 16.

Correction.—The article on page 272 of the present number, on Ulcus Serpiginosum Syphiliticum, should have been credited to John C. Jay, Jr., M.D., of New York, and not as given.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending Oct. 21, 1871.

Cities and Towns.	*No. of Deaths.*
Boston	88
Charlestown	9
Worcester	20
Lowell	16
Chelsea	2
Salem	9
Lawrence	15
Springfield	4
Lynn	15
Gloucester	7
Fitchburg	3
Newburyport	4
Somerville	7
Fall River	12
Haverhill	7
	217

Prevalent Diseases.	
Consumption	42
Pneumonia	15
Typhoid fever	13
Croup and Diphtheria	10
Cholera infantum	10
Scarlet fever	5

Lowell reports four deaths from smallpox.

George Derby, M.D.,
Secretary of State Board of Health.

Deaths in Boston for the week ending Saturday, Oct. 21st, 88. Males, 36; females, 52. Apoplexy, 2—anæmia, 1—inflammation of the bowels, 2—bronchitis, 1—congestion of the brain, 1—disease of the brain, 2—cancer, 2—cholera infantum, 4—consumption, 17—convulsions, 3—croup, 1—cyanosis, 1—debility, 2—diarrhœa, 1—dropsy of brain, 1—drowned, 1—dysentery, 2—diphtheria, 1—epilepsy, 1—erysipelas, 1—scarlet fever, 1—typhoid fever, 4—gangrene, 1—disease of the heart, 5—intemperance, 1—disease of the kidneys, 3—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 5—marasmus, 1—old age, 1—paralysis, 1—premature birth, 6—pyæmia, 1—puerperal fever, 1—disease of the stomach, 1—suicide, 1—syphilis, 2—teething, 1—tumor, 1—unknown, 1.

Under 5 years of age, 32—between 5 and 20 years, 10—between 20 and 40 years, 24—between 40 and 60 years, 8—above 60 years, 14. Born in the United States, 58—Ireland, 21—other places, 9.